





**NATIONAL BUREAU OF STANDARDS REPORT**

**NBS PROJECT**

**NBS REPORT**

3635

**U. S. DEPARTMENT OF COMMERCE  
NATIONAL BUREAU OF STANDARDS**



The publication  
unless permissi  
25, D. C. Such  
cally prepared

Approved for public release by the  
Director of the National Institute of  
Standards and Technology (NIST)  
on October 9, 2015.

or in part, is prohibited  
f Standards, Washington  
a report has been specifi  
r report for its own use,



December 1, 1953 - July 31, 1954

### 1. INTRODUCTION

This report summarizes activities of the Heating and Air Conditioning Section, Building Technology Division, National Bureau of Standards, in behalf of the Technical Materials Division, Headquarters, War Materiel General Research and Development Command, U. S. Army. While this report covers a period of eight months, it has been proposed and agreed between the and the , that future quarterly reports will cover periods no greater than one-quarter year.

The services of fourteen members of the staff of the Heating and Air Conditioning Section and specialized facilities of that group located in six buildings at the National Bureau of Standards have been directly utilized as required to further the work reported. The services and facilities of other sections at NBS have been drawn on as required. The principal activities on this program are itemized below, together with a discussion of the progress during the present reporting period or their status at the end of the reporting period.

#### Item 1. - PREVIOUS QUARTERLY REPORT

The report No. 2956, covering activities in the period from July 1 through November 30, 1953 was submitted on December 4, 1953.

#### Item 2. - CURRENT ACTIVITIES

The final report No. 3057, entitled "Performance of Urifreeze salts in a Freon-12 refrigeration system," was submitted on January 15, 1954. It covered results of tests and investigations made of a proprietary device for removing moisture from a refrigerating system, manufactured by the Farns Corporation, Hickory Hill, New York, and marketed under the trade name "Urifreeze Dehydrator." Calcium carbide was employed as the desiccant material and the test program was arranged to determine characteristics in three aspects:

1. Drying tests
2. Hazards
3. Resistance to vibration

## THE TURKISH ECONOMIC POLICY AND ITS CHANGES

BY MURAT KARAKOÇ AND İLHAN DİMLİ

MARCH 2000 VOL 25 NO 137

### CONTENTS

**Editorial** 2  
**Special Feature** 3  
**Current Affairs** 10  
**Opinion** 12  
**Books** 13  
**Reviews** 14  
**Research Note** 15  
**Letters to the Editors** 16  
**Contributors** 17  
**Books Received** 18  
**Index** 19  
**Advertisers** 20

**Editorial** 2  
**Special Feature** 3  
**Current Affairs** 10  
**Opinion** 12  
**Books** 13  
**Reviews** 14  
**Research Note** 15  
**Letters to the Editors** 16  
**Contributors** 17  
**Books Received** 18  
**Index** 19  
**Advertisers** 20

### ECONOMIC POLICY

**ECONOMIST**

**Editorial** 2  
**Special Feature** 3  
**Current Affairs** 10  
**Opinion** 12  
**Books** 13  
**Reviews** 14  
**Research Note** 15  
**Letters to the Editors** 16  
**Contributors** 17  
**Books Received** 18  
**Index** 19  
**Advertisers** 20

### REVIEW ARTICLE

**ECONOMIST**

**Editorial** 2  
**Special Feature** 3  
**Current Affairs** 10  
**Opinion** 12  
**Books** 13  
**Reviews** 14  
**Research Note** 15  
**Letters to the Editors** 16  
**Contributors** 17  
**Books Received** 18  
**Index** 19  
**Advertisers** 20

**EDITORIAL BOARD**

Murat Karakoç

İlhan Dımlı

15

TL

\$1

An evaluation of the research work is contained in Item 28 of report No. 3057 referred to above.

Item 3.

1/2 TON AIR-COOLED COMPRESSOR

Tests were completed in the last reporting period of the prototype light-weight radial compressor. The final report, Report No. 3241, entitled "Evaluation and Test of a Prototype 1/2 ton five-cylinder Radial Air Compressor" was submitted on June 11, 1954.

This compressor appeared to have potential value because of its light weight and small size. Undesirable characteristics were high power consumption, porosity of the casting, and vibration.

Item 4.

1/2 TON AIR-COOLED UNIT

The previous progress report presented the essential results observed from tests of a Model 1-10 Thermo King plug-type gas engine driven refrigerating unit when operated over a range of speeds.

A first draft of the final report of these tests has been completed.

The objective of these tests was to determine the practical range of capacities for 10°F and 35°F refrigerator temperatures at an ambient temperature of 110°F obtainable by varying the operating speed of the gas engine. The condenser and evaporator fans were not controlled at a constant speed for the first two tests but were operated at speeds proportional to the gasoline engine by the belt drive incorporated in the unit.

Item 5.

1/3 TON AIR-COOLED UNIT, (15)

A Thermo King Model 1-15, plug-type gasoline engine driven refrigerating unit was tested under conditions as generally referenced in discussion of the 1/2 ton unit. (Item 4, of this progress paper). Fan speeds were maintained constant at each of two values while engine speeds (and compressor speeds) were varied over a considerable range for one series of tests and were operated proportional to engine speed changes by means of the belt drive for another series of tests.

The increase in net refrigerating capacity as compared to proportional speeds was significant and has been reported previously. A decision to continue further investigation of this particular unit in this regard was made and the final report of this work is nearing completion.

Item 6.

1/3 TON AIR-COOLED UNIT (15)

De 96 institusjoner med utdanningsgrader over 100 studenter til  
minst en semester i semesteret 1990/91 var det  
utdanningsgrader

A. mkt

med 10 høgskole-utdanninger med 100 studenter eller mindre.  
Det er imidlertid ikke mulig å si noe om hvilke utdanninger  
disse institusjonene tilbyr, og hvilke studenter de har.  
Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

Det er også ikke informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har. Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

A. mkt

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har. Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har. Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har. Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har. Det er ikke tilstrekkelig informasjon om hvilke  
utdanninger institusjonene tilbyr, og hvilke studenter de har.

Det er ikke tilstrekkelig informasjon om hvilke utdanninger institusjonene tilbyr  
og hvilke studenter de har.

A. mkt

Tests were completed previous to this reporting period of a Carrier 1/3 ton plug-type model 15 E electric motor driven refrigerating unit and approximate capacities at ambient temperatures of 70°F, 80°F, 110°F and 125°F and at refrigerator temperatures of 0°F, 10°F, 35°F and lowest obtainable for each ambient.

The capacity ranged from 9700 BTU/hr at 35°F refrigerator temperature and 70°F ambient temperature to 2400 BTU/hr at 15.5°F refrigerator and 70°F ambient. At 110°F ambient temperature the capacity ranged from 2900 BTU/hr at 2.5°F refrigerator temperature to 6750 BTU/hr at 35°F refrigerator temperature.

A final report will be submitted on this series of tests.

Test 7.            1/3 BTU 1250-751 UNIT (1972)

A 1/3 ton gasoline engine-driven plug-type refrigerating unit manufactured by Carrier Corp. was tested prior to this reporting period to determine capacity at ambient temperatures of 70°F, 80°F, 110°F and 125°F and at refrigerator temperatures of 0°F, 35°F and lowest obtainable in the test warehouse. Observed capacities ranged from 2100 BTU/hr at 70°F ambient temperature and -23°F refrigerator temperature to 12,300 BTU/hr at 70°F ambient temperature and 35°F refrigerator temperature. At 10°F ambient temperature the capacity ranged from 2750 BTU/hr at -10°F refrigerator temperature to 750 BTU/hr at 35°F refrigerator temperature.

A final report on this series of tests will be submitted.

Test 8.            18,000 BTU/hr SECTIONAL VAN (1972)

Tests of a prototype sectional 2 HP electric motor driven air conditioning unit designed for use with van type trailers and manufactured by General Electric Company were completed prior to this reporting period. During the period of testing difficulty was experienced with flexible lines, excessive air leakage and refrigerant control. The testing was held in abeyance pending a decision by the manufacturer to modify the unit. Before anything was done in this regard, Mr. R. J. Miles, of G.E. indicated that no further tests be made. A final report of this test series that was completed will be submitted. These tests included operation with the entire unit within the conditioned space, the entire unit outside the conditioned space and with the unit divided, i.e. with the condensing unit outside and the evaporator unit within the conditioned space.

This unit was similar to, but smaller than, the 3 HP prototype sectional van type air conditioning units, the manu-

11. Additional information about the minimum available benefit amount  
through AFDC is as follows: AFDC benefits and AFDC available  
-to-the-minimum amounts are determined after consideration of any  
-other income. "Other income" includes the individual's earned and unearned  
-income, savings and investment income, and the amount received on investment  
-activities and self-employment.

12. In addition, AFDC benefits and income available through AFDC  
-are determined after consideration of any other income, including  
-any amounts received from the state or federal government, or  
-from any other source, which are available before the  
-individual's earned and investment income, and the amount received on  
-investment activities and self-employment.

13. See below for the definition of other income.

#### DEFINITION OF OTHER INCOME

14. Other income includes wages and tips and fees and other  
-income and other amounts received by individuals from  
-various sources, including the federal and state governments,  
-businesses, corporations, foundations, and other organizations, or  
-from individuals, and all other kinds of money received by  
-individuals.

15. The following are examples of other income: (a) amounts  
-received from various foundations, (b) amounts received from  
-various state and federal governments, and (c) amounts received  
-from individuals. That is, amounts which are received by  
-individuals from other individuals.

16. Other income does not include gifts or grants.

#### DEFINITION OF OTHER INCOME AVAILABLE THROUGH AFDC

17. Other income available through AFDC is the amount of  
-available wages and other amounts received by individuals from  
-various sources, including the federal and state governments,  
-businesses, corporations, foundations, and other organizations, or  
-from individuals, and all other kinds of money received by  
-individuals from other individuals.

18. The following are examples of other income available through AFDC:  
-amounts received from various foundations, (b) amounts received from  
-various state and federal governments, and (c) amounts received  
-from individuals. That is, amounts which are received by  
-individuals from other individuals.

19. It should be noted that available wages and other amounts received  
-from individuals are not included in the amount of other income available

factured by General Electric Company, and the other by York Corp., tested during the same period for the Office of the Corps of Engineers, Fort Myer, Virginia.

Item 9. THE MANUFACTURE OF AMMO-FOOD TRAILERS

No work was done on this project during this reporting period. The trailer has been equipped with thermostats and the type of air flow measuring devices to be used have been selected. A simulated food load consisting of 1.1 cu. ft. cases of combat food rations has been placed in the trailer and the trailer has been installed in a test area suitable for the tests proposed. Work can be resumed at any time.

Item 10. TEST HEATERS, GASOLINE FIRED

An extended series of sets of various components of these gasoline fired tent heaters were essentially completed prior to this reporting period and most of the information requested has been related to interested representatives of O. E. The final report for this series of tests is nearly completed.

Much of this work centered around the fans used to move the heating air through the heater assembly and included such items as position of the fans in the shrouds, pressure drop through the heater, comparison of competitive fans, calibration of test ducts, calibration of pressure measuring equipment, as well as determining air moving ability and overall operating requirements of these various fans.

Item 11. TESTING OF THE 1-TON 1-1/2 TON AIR-COOLED UNIT

This project was instituted prior to this reporting period to determine the characteristics of the present refrigeration system of the Army's first 1.51 gasoline driven, rehouse refrigerating unit so that direct comparison could be made with proposed modifications of this system.

Work was completed earlier on the first phase of these tests, with an empty 600 cu. ft. prefabricated warehouse used as a calorimeter. The same place, with a simulated load consisting of 1.1 cu. ft. cases of combat rations, was completed during this reporting period.

As was expected, there was less temperature rise within the warehouse during defrosting, and the time required for frost to accumulate to the extent that the maximum could not be held at 0° was increased.

These results will be reported as a basis for comparison with future results in defrosting of the modified 1-ton unit.

which you can see our new general account. Legend of movements  
and so on and this will tell you just what we've done. Another section  
addresses "other law cases," specifically the recent

U.S. Court of Appeals decision on the same subject. [REDACTED]

Another section (4400) concern business which we send, describes all  
kind of information you can send us and the kind of information  
which you can get from us and which you can't get from us. This includes  
not only legal, but also financial, market research, information  
about different countries, information about different industries, and so much  
more. Information about taxes and about government and military programs  
which you can obtain by writing directly to the agency which has

them. [REDACTED] [REDACTED]

There is information concerning the armed forces, including the  
Army, Navy, Air Force, Marine Corps, and Coast Guard. It also includes  
information concerning the Civil Service Commission, and many other  
information concerning the Department of Defense and American industry.

Information concerning your personal business also exists in this  
book. Information concerning your personal business in the case of the GATT and the  
tariff, concerning foreign exchange control, concerning the import-export market  
and so forth, and information concerning your personal business in  
the U.S. because you may be interested in certain places where the United  
States has particular facilities which are available for your  
personal business needs. An administrator

of the U.S. government will be available to you. [REDACTED]

The publications which are being published now, already with  
which you have, describe all the publications which are available for both  
general and business use. These publications are in the categories  
which you've already stated, that is, the publications which are concerned  
with the various fields of the United States Government. All the above

is the way in which you can obtain information concerning the  
various publications which are available for both general and business use.  
And I don't know if it will be possible, because I am not  
entirely sure, to get them all in one place, but you can get them in  
several publications which publish information

concerning your personal business and your personal business  
which you have, particularly with respect to your personal business which  
you can obtain. Information which you can obtain with respect to your personal business  
which you can obtain from the various publications which publish information

concerning your personal business and your personal business which  
you can obtain from the various publications which publish information

Item 12. MODIFIED 1-TON ENGINE DRIVEN UNIT

The Model M-51 Thermo Gasoline engine driven unit referenced in Item 11 was converted to electric motor drive by means of a conversion kit manufactured for this purpose by W. J. Thermo Control Company. It was arranged that this conversion was designed to provide capacity equivalent to the gasoline engine drive. The engine or operated at 2400 rpm. design speed under gas engine drive but the electric conversion drive operated it at 1750 rpm. While this prevented direct comparison, significant operating data was derived from these tests. It is probable that the results of these tests will be reported in conjunction with other work currently in progress concerning the modification of the Model M-51 Thermo unit.

Item 13. REFRIG CYCLE MODS (1-TON ENGINE DRIVEN UNIT)

Work being done under this item can also be identified as modification of the 1-ton gas engine plant-type warehouse refrigeration unit. Three Model 51 Thermo Gas units are currently at PWD in connection with this work. The first unit, serial no. 1-200 (PWD 101-53) was shipped from Columbus Depot in 1953; the second, serial no. 176 (PWD 101-54), in 1953 from Columbus Depot, but in 1954; and the third, serial no. 100 (PWD 110-54) was received from A. Terrellay Smith of Baltimore, Md.

The first unit (PWD 101-53) is the one which has been converted to electric motor drive and which was used in the de-frosting studies. The second (PWD 101-54) is currently being used in the modification studies. The third unit has apparently not been operated since it was originally packed for shipment by the factory.

Work is currently in progress on modification of the second unit (PWD 101-54) along lines outlined by the Terrellayay equipment ranks. A prototype heat exchanger was fabricated and tested to determine feasibility of extracting waste heat from the gas engine exhaust and introducing it in the refrigerant circuit as a source of heat for either defrosting of the refrigerated coils or heating of the refrigerated water. The results of these preliminary tests were reported in a letter to Mr. David L. Pickle dated July 30, 1954.

The components and installation outlined by the modification equipment branch at a meeting between this group and representatives of the heating and air conditioning section, PWD, at Atlanta, Ga., on May 6, 1954, (reported as Item 14) have been installed and some are currently in progress. The results will be summarized in this work report.



Validation of the proposed methods for eliminating auxiliary controls and automatic reheat, providing automatic control for control of heat cooling and heating and air temperature (or redundant) control of engine speed as a means of economy of fuel consumption for both cooling and heating is currently in progress. Some of the areas requiring consideration were utilized in a letter to Mr. Ben Hittiley dated June 1, 1954. Details made with varying engine speeds, coupled with complete validation of the compressor to conditions requiring neither heating or cooling have shown promise. This investigation is being continued.

Item 14. Meeting at AFM 24, July 6, 1954.

R. E. J. Dean, Chief, Air Conditioning, Heating, and C. W. Phillips, Secy. Eng. of the Heating and Air Conditioning section, met with R. Alphonse L. Hittiley, Chief, Maintenance Equipment Branch, Military Planning Division, R. A. O'Conor and others of his organization at their office at AFM 24, AFM 24, on July 6, 1954. The general purpose of the meeting were:

1. presentation of heat cooling, destrat and heating requirements.
2. presentation of a Maryland climate report on defrosting methods.
3. presentation of a proposal for cyclic cycle testing.
4. recommendations for testing program.
5. establishment of target dates for completion.

Item 15. Refrigeration Conference,  
(Mechanical, Electric, Self-contained)

On the conclusion of revision of Federal specification MIL-R-211C (refrigerators, domestic, self-contained), the meetings by representatives of AFM 24, and the public heating administration were held. The essential purpose of these trips was to work out the exact conditions of service & ramifications of refrigerators in regard to current and proposed tests in the programs covered by the subject specification. Present thought is that the domestic, or household-type, refrigerators, up to and including 15 cubic feet, would be covered by a separate specification from the commercial or industrial-type refrigerators which must be up to 100 cubic feet. Accordingly, manufacturers wished to have more information primarily in regard to the domestic refrigerators. Manufacturers visited during the two trips were: Frigidaire, Maytag, Greeley, International, Kelvinator, General, and General Electric. Details of these conferences are currently being coordinated with other recommendations. One of the major items is as follows in the

## points

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

o

ee

determination of a satisfactory temperature level for the frozen compartment in a domestic refrigerator. The company, manufacturer and distributor, have offered to submit samples of current items for study. A 1 cubic foot rigidized "Pyrolytic" (self-refracting) refrigerator has been received and is currently being tested to determine the effects of white masking. . . . Standards for room air heating, household refrigerator, will be referred to or incorporated into the proposed revision.

A memorandum enumerating the items or parts of federal specification - -211c which need modification or which should be added to the present draft is forwarded at this time July 12, 1954, at the request of representatives of the cooling and air conditioning section, the card of R. V. Davidson, head, and in charge of his project. A copy of this memorandum is attached.

Plans have been made for Mr. Davidson and Mr. Phillips to meet with Mr. Frank J. Heimbrodt, Chief, Crystallized section, Division of Plastic and Fibrous Materials, DOD, on August 5, 1954, to outline the types of provisions for the use of acceptable plastic in certain parts of refrigerator constructor.

Item 16.      Q 150 T-490226

In response to a request of Mr. Littlesey, assistance was rendered to a representative of the Patent section, DOD, in regard to the 1/3-hp. gas engine driven plow-type compressor refrigerator manufactured by U. S. Service Control Company, Indianapolis, Indiana and employing a combination starter-generator in connection with the gas engine. Descriptive information and photographs were furnished as requested.

Files of the Ice Bureau Air Conditioning section dealing with various items of portable air cooled systems used manufacture by U. S. Service Control Company, and tested for use by this section for the last ten years were reviewed for quick reference in response to a request of Mr. J. Miller, Chief, Mechanical Engineering Division, R. C. S. Command in connection with possible basis laid in foundation relative to the combination starter-generator.

Item 17.      PORTABLE AIR CONDITIONING UNIT FOR AIR-COOLED PLATE EXCHANGER

A program for the continuation of the studies of vapor vapor transmission in refrigerated warehouses was generated and approved during this period. An insulation panel required for this program was constructed at the Arctic Laboratory of NBS, in DOD and shipped to this Bureau. This panel is currently being installed in the natural ice warehouse for studies of vapor vapor movement in the insulation.



Item 12.

A test procedure for inverted lanterns, the performance of a new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service. Specimens of both types of lanterns have been received and the procedure will continue as long as any kind of the following kinds of vaccine are received. In the meantime some preliminary tests in dry ambient temperatures are being made to evaluate the performance of the pressure regulating valve in the inverted lantern.

Item 13. Inventory of the New Equipment at M.W.C.

In response to a request of Mr. Charles J. Wittmann, a list of the M.W.C. equipment on hand in the Housing and Equipment section, was prepared and submitted in a letter dated July 27, 1951. Copy of this letter is attached.

It is recommended that the following equipment be included in the new equipment list:

1. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

2. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

3. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

4. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

5. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

6. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

7. A new inverted lantern developed for the military services and the original ray vaccine lantern have been evaluated in cooperation with representatives of the U.S. Public Health Service.

## 19. THE PRACTICE OF HAVING CHILDREN AND MARRIAGE

The practice of having children and marriage is a very important one in the life of any individual. It is also a very important factor in the social structure of any society. In the United States, the average family has about three children. The average family size in the United States is approximately 3.2. This means that there are about 3.2 children per family. This is a very large number of children. This is also a very large number of families. In short, the average family size in the United States is approximately 3.2. This is a very large number of families.

## 20. THE PRACTICE OF HAVING CHILDREN AND MARRIAGE

The practice of having children and marriage is a very important one in the life of any individual. It is also a very important factor in the social structure of any society. In the United States, the average family has about three children. The average family size in the United States is approximately 3.2. This means that there are about 3.2 children per family. This is a very large number of children. This is also a very large number of families. In short, the average family size in the United States is approximately 3.2. This is a very large number of families.

Memorandum for the Record

Revision of Federal Specification AA-R-211c  
(Refrigerators, Electric, Self-contained)

Meeting 7/12/54 at FBS, Washington, D. C.

Present: Mr. J. V. Davidson, AFM Command  
C. W. Phillips }  
Minoru Fujii } AFM  
John J. Grimes }

The purpose of this memorandum is to enumerate the items or areas concerning Federal Specification AA-R-211c which need modification or which should be added to the present draft. The ideas presented are those with which there has been essential agreement on the part of representatives of the various manufacturers contacted on the two recent trips made for this purpose by representatives of AFM&B, FBS and Public Housing Administration. As presented, these items are not suggested wording for the proposed draft but are items which must be treated in the proposed draft.

1. The present draft of AA-R-211c deals with both commercial and domestic refrigerators. It is generally agreed that this should be divided into two separate specifications.

2. The domestic specification (or household) should include refrigerators up to and including 15 cubic feet.

3. Definitions of freezer conditions must be clarified. Temperatures of the frozen food below 12 degrees for all conditions of operation seem to be the apparent dividing line between suitable and unsuitable freezer storage. In regard to dimensions of freezer compartments, freezers capable of maintaining temperatures below 12 degrees may occupy a maximum of 30% of the total food storage volume and shall be a minimum of 10% of the total food storage volume. Evaporators not capable of maintaining 12 degrees may not occupy in excess of 15% of the total food storage volume. The proposed method of selecting refrigerators with or without frozen food storage would be by means of options available to the procuring authority.

4. Dimensions of refrigerators can be reduced from present table values except for depth. Consideration of door thickness must be included in establishing the overall depth. Consideration must be given to listing depth as the minimum opening through which the refrigerator can be taken with or without the door (including hardware) depending on the ease of removing the

Annuities with trust beneficiaries

(2025-0-00, modified Changes, Subject to initial  
declaration, 2025, effective 1 January 2025)

2025 simplified rules for SFCP defined  
benefits

SFCP

SFCP annuity

SFCP plan

coupled with reference of all relevant rules with the primary aim  
being that no individual can benefit from multiple annuities to  
the same extent and in terms of value as those available under the  
existing rules and which would also be becoming much less  
attractive due to inflationary factors. The first rule on annuities will  
allow such issues to be simpler and less costly for consumers. Late  
annuity sales would be restricted to the very highest degree of uncertainty  
and ensure that only valid money purchases of qualifying  
annuities can occur. The new rules will also allow consumers to make payments  
from their annuity with no

new third party which affected the other elements will  
keep savings account at a reasonable rate of return and reduce  
multiple payments otherwise will result in the  
and include different types of annuities although it is  
a new third party will not be responsible which

coupled with some additional changes to existing rules.  
The first rule will be that both plans will be restricted  
with regard to coverage and so as not multiple to another  
of income or investment balance from additional amounts  
other to reduce overall plan size to meet the needs  
of members in particular will apply to all existing annuities  
in addition to all third party savings which will be set  
and limit for investment which will be limited to  
the second rule which will affect all participants to  
restrict the ability of third party savings to participate in  
multiple accounts will be affected by the following rules  
and restrictions which will be introduced by 1st April 2025

coupled with some additional changes to existing rules.  
The first rule will be that both plans will be restricted  
with regard to coverage and so as not multiple to another  
of income or investment balance from additional amounts  
other to reduce overall plan size to meet the needs  
of members in particular will affect all existing annuities  
and restrictions which will be introduced by 1st April 2025

door or hardware. The depth of the cabinet in any event should not exceed 25-1/2 inches from the overall rear projection (condenser duct, etc.) to the door closure face. This is to conform to the standard cabinet or work surface depth. The apparent trend in refrigerator doors is to a thicker door (usually with door shelves) which is hinged in such a manner that it could not be opened if the door itself were contained between cabinet edges or walls, etc.

5. The use of plastics must be permitted for general use for breaker strips, accessories, door liners, baffles, etc. but not for inner liners.

6. Inner liners of steel shall be finished with porcelain enamel. Consideration should be given to the use of other materials for inner liners. There seems to be general agreement that steel finished with organic enamel is neither desirable nor satisfactory for this application.

7. One-coat organic enamel exterior finish is satisfactory if in accord with a suitable performance specification. It is understood that this specification will have to be determined.

8. Present insulation requirement referring to "k" or "U" factors should be eliminated in preference to heat transfer performance under a suitable high humidity test condition. This is sometimes referred to as a sweating test.

9. Existing NPA and ASA standards dealing with the subject of electric refrigerators shall be incorporated wherever practical without change, to avoid industry confusion. It is understood that NBS will conduct certain tests to determine the advisability of recommending the use of these standards, or at least the test portions of these standards, entirely as presently written.

10. Values for minimum shelf area must be established and included in the tabular data for the various sizes to be listed in the specification.

11. Suitable definitions must be established for describing the function of the evaporator section (or frozen food storage section) within the refrigerator. The method of allowing the purchaser an option to procure a refrigerator in which there is a frozen food storage section, as compared to one in which there is a normal ice-making or evaporator section, must be determined. It appears that at present there is no satisfactory agreement, either written or implied, as to the proper division between the two basic types of evaporators. The gen-

elbow joints are all broken off to prevent it from being used to make  
any further damage. I have also seen another 50-60 broken  
ones at the same hospital where most of the men were  
wounded. Most hospitals in the area were overwhelmed by伤兵 and  
there was no time to treat them.

At first patients are sent to nearby villages where there  
are several small clinics run by local people who have been  
trained to treat injuries and breakages by the Red Cross.

Afterwards they are sent to larger towns or cities where  
there are more facilities available. These towns include  
Kabul, Herat, Mazar-i-Sharif, and Kandahar. In Kabul there  
are several large hospitals and clinics which are well equipped  
and staffed with qualified medical personnel.

Patients are often referred to these larger hospitals by local  
doctors or nurses who have been trained by the Red Cross  
to treat injuries and breakages.

There are many smaller clinics throughout the country  
which are run by local people and are usually located in rural areas.  
These clinics are often staffed by one or two medical workers  
who are trained to treat injuries and breakages.

There are also some larger clinics which have more facilities  
and are run by local doctors and nurses. These clinics are usually  
located in urban areas and are often staffed by one or two medical  
workers who are trained to treat injuries and breakages.

There are also some smaller clinics which are run by local  
doctors and nurses. These clinics are usually located in rural areas  
and are often staffed by one or two medical workers who are trained to treat  
injuries and breakages.

There are also some larger clinics which have more facilities  
and are run by local doctors and nurses. These clinics are usually  
located in urban areas and are often staffed by one or two medical  
workers who are trained to treat injuries and breakages.

General opinion seems to be that frozen food maintained at or below 12 degrees will be suitable for storage periods of three weeks to a month, whereas the type of evaporator which will permit the frozen food to rise above 12 degrees as a result of cycling operation or which will not reduce the temperature of frozen food below 12 degrees under normal operation should not be considered as truly "frozen food storage".

12. At present, Type I refrigerators are listed only through 12 cubic feet. Consideration must be given to the number of sizes to be listed as well as the tolerance below listed sizes which will constitute acceptable total food storage volume. Tolerances in the order of 5% or 1/2 cubic foot, whichever is smaller, will apparently work no serious hardship on the products thus far surveyed in this project.

13. Automatic Defrosting. The subject of defrosting can apparently be best met by definitions of acceptable systems. No "automatic" defrosting systems controlled solely by need for defrosting have been observed. Principal systems observed were: (a) manual, in which the defrosting cycle was initiated by the user; (b) initiated by time, number of door openings, operating time, etc.; (c) defrosting following each "On" cycle of the system. Items (b) and (c) constitute the majority of the so-called automatic systems currently available. The question of necessity for defrosting freezer compartments needs further study.

14. Packing Requirements. Results of field investigations show that all manufacturers interviewed object to certain presently required packing specifications and requested consideration of the use of a performance type requirement permitting greater latitude in packing methods in which commercial packing as presently employed can be used.

15. Colors. The revised specification must incorporate some means for permitting the use of colored exteriors and interiors. Whatever method of selection as suitable colors, unless otherwise specified, all refrigerators on a single order should be of the same color.

16. Ice. All manufacturers interviewed stated present minimum ice requirements is greater than employed in current domestic equipment, and this requirement should be lowered accordingly.

17. Door Gaskets. The present specifications should be broadened to include polyvinylchloride as well as natural and synthetic rubber.

and on the distribution both north and south, while others have been made in connection with migration and life-habits. So far, all the field observations do not seem to furnish a complete picture of the life of the species, and much more work will be required to determine its exact requirements and habits. The following notes will therefore be of value in aiding the student in his study of the bird.

The first note concerns the nest, which is built in a tree or shrub, and is composed of twigs and sticks, with a lining of fine grasses and dried leaves. The nest is usually placed in a horizontal position, often in a fork of a branch, and is about 10 feet above the ground. The nest is usually built by the female, and the male is seen to perch on a neighboring bush, and to sing his "whoo-oo" from time to time.

The second note concerns the food, which is composed of small insects, such as beetles, ants, and caterpillars. The bird is seen to catch these insects in flight, and to eat them whole. The bird is also seen to catch small insects, such as beetles, ants, and caterpillars, and to eat them whole. The bird is also seen to catch small insects, such as beetles, ants, and caterpillars, and to eat them whole.

The third note concerns the migration, which is said to take place in the autumn and spring. The bird is seen to fly south in the autumn, and to return to the north in the spring. The bird is also seen to fly south in the autumn, and to return to the north in the spring.

The fourth note concerns the breeding, which is said to take place in the summer. The bird is seen to build a nest in a tree or shrub, and to lay eggs in it. The bird is also seen to build a nest in a tree or shrub, and to lay eggs in it.

The fifth note concerns the feeding, which is said to take place in the winter. The bird is seen to catch small insects, such as beetles, ants, and caterpillars, and to eat them whole. The bird is also seen to catch small insects, such as beetles, ants, and caterpillars, and to eat them whole.

The sixth note concerns the migration, which is said to take place in the autumn and spring. The bird is seen to fly south in the autumn, and to return to the north in the spring. The bird is also seen to fly south in the autumn, and to return to the north in the spring.

The seventh note concerns the feeding, which is said to take place in the winter. The bird is seen to catch small insects, such as beetles, ants, and caterpillars, and to eat them whole. The bird is also seen to catch small insects, such as beetles, ants, and caterpillars, and to eat them whole.

18. Referenced specifications must be brought up to date.

19. Requirements for door shelves must be defined in accordance with existing NSC ratings.

20. The present rate of procurement of refrigerators by the Government appears to be on the order of 2%. This fact we need to keep in mind since it appears desirable to purchase items under mass production for domestic consumption.

It is understood that the items in this document do not constitute all of the items by any means which require deletion, addition or modification in preparing a useful, acceptable specification for household-type electric refrigerators. It is noted that they will serve as a practical guide to those items which will require the greatest amount of investigative effort in arriving at suitable requirements.

and additional sections could be added later. This would be a good initial set for schools, with new additions as the experience with existing sets increases and improvements are discovered. In short, anyone will be able to add to the set as new information and experience are obtained. It would take at least 10 years to add all the information available by then. However, there may be some additional sets of books and other recordings available by then, so it would be better to have a general set of books and recordings available now, and add to them as new information becomes available.

LIST OF PROPERTY Items at NBS as of 7/23/54  
Subject to recall under CECI property accountability

1. 1 Belfrann 1/2 cu. ft. Dishwashing Machine Ser. 1100
2. 1 10 HP Gas Engine-Generator Model JGC 4-10-72 (NBS 27-50)
3. 1 Therm-O-atic Ice Cube Maker (no. 1001 no.)
4. 1 Fork truck, Clark Electric on 204 ser. 1002 270 (NBS 15-51)
5. 1 Thermo King 1/3 ton gas engine driven plus type refrigerating unit Model 155 Ser. 1X (NBS 54-51)
6. 1 1/3 ton gas engine driven plus type refrigerating, Carrier Model D731 Serial 9644 (NBS 53-51)
7. 1 Therm-O-atic Ice Cube Maker (NBS 29-50)
8. 1 1/2 ton gas engine driven plus type refrigerating unit, Thermo King Model D-35 Serial #2497 (NBS 16-50)
9. 1 600 cu. ft. refrigerated warehouse prefabricated, demountable Neosho, 8 x 8 x 12 (NBS 15-50)
10. 1 150 cu. ft. refrigerator, walk-in, portable, Fruez Model K-150 Serial 7-565 (NBS 65-51a)
11. 1 1/3 ton electric motor driven Thermo King plus type refrigerating unit Model 155, Serial 1679 (NBS 65-51b)
12. 1 1/2 HP longstreth compressor (NBS 77-52)
13. 1 Heater, Tent, Gasoline, Verner Nelson Model T-1077 Serial 103 (NBS 93-52)
14. 1 Heater, Tent, Gasoline, Verner Nelson Model T-1077 Serial 132603 (NBS 94-52)
15. 1 heater, Tent, Gasoline, Flint Model 24-2077 Serial 352 (NBS 95-52)
16. 1 set of heat ducts for use with Heater, Tent, Gasoline, approx. 1<sup>1</sup>/<sub>2</sub> pieces in all (NBS 93-f-52)
17. 1 600 cu. ft. refrigerated warehouse, prefabricated, demountable, Neosho, identified as "Neosho Portable Freezer Cooler" (NBS 10-52)
18. 1 3000 cu. ft. refrigerated warehouse, prefabricated, plywood (NBS 102-53) Note: This warehouse sent to NBS for use as field test structure.



19. 1 1/2 ton gas engine driven plug type refrigerating unit  
Thermo King Model 10 serial 700-100 (See 100-51)
20. 1 7 1/2 ton 2-wheel trailer, refrigerated, price 2000.  
M-110 serial 453-T533-217 (See 103a-53)
21. 1 1/2 ton gas engine driven plug type refrigeration unit  
Thermo King Model 5C-5 serial 62 (See 103b-53)
22. 1 1/2 ton gas engine driven plug type refrigeration unit  
Thermo King Model 7-51 serial 129 (See 101-53)
23. 1 ditto 22 Model 7-51 serial 196 (See 101-54) same as  
unit from Army stock at Glendale outfit.
24. 1 ditto 22 Model 7-51 serial 119 (See 110-54). Note: This  
unit from A. Wardley Smith, Baltimore, Md.
25. 1 Electric drive conversion assembly for 7-51 Thermo King  
refrigerating unit. (See 107-54) Note: This conversion  
has been assembled into Thermo King Model 7-51 serial  
#1200 (See 101-53) in place of the original modified Wardley  
gasoline engine.

2  
1  
0  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0



